



SEQUENCE LISTING

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<110> Yoon, Kyonggeun

<120> Novel Gene Therapy Methods For The Treatment of Skin Disorders

<130> JEFF-YOO01

<140> 09/473,872

<141> 1999-12-28

<160> 68

<170> PatentIn Ver. 2.1

<210> 1

<211> 16

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<223> Description of Artificial Sequence: Mouse tyrosinase polypeptide fragment

<400> 1

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1 5 10 15

<210> 2

<211> 48

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Mouse tyrosinase gene fragment

<400> 2

ttcatgggtt tcaactgcgg aaactctaag tttggatttg ggggcccc

48

<210> 3

<211> 48

<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence: Mouse
tyrosinase gene fragmet

<220>

<400> 3

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48

<210> 4
<211> 68
<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence: Chimeric
oligonucleotide

<400> 4

actgcggaaa ctgtaagttt ggattttta auccaaacut acaguuuccg cagugcgcgt 60
tttcgcgc

68

<210> 5
<211> 16
<212> PRT
<213> Artificial Sequence

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tyrosinase polypeptide fragment

<400> 5

Phe Met Gly Phe Asn Cys Gly Asn Cys Lys Phe Gly Phe Gly Gly Pro
1 5 10 15

<210> 6
<211> 48
<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Mouse tyrosinase gene fragment

<400> 6
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<210> 7
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<400> 7
aagtacccaa agttgacgcc tttgacattc aaacctaaac ccccggtt 48

<210> 8
<211> 68
<212> DNA
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<223> Description of Artificial Sequence: Chimeric oligonucleotide

<400> 8
actgcggaaa ctctaaagttt ggattttta auccaaacut agaguuuccg cagugcgcgt 60
tttcgcgc 68

<210> 9
<211> 19
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 9

aagaatgctg cccaccatg

19

<210> 10

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 10

gacatagact gagctgatag tatgtt

26

<210> 11

<211> 52

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Mouse DSG3
gene fragment

<400> 11

atccactgg agggaccttg aaggacttat gctgcgccag tcaacatgac tt

52

<210> 12

<211> 78

<212> DNA

<213> Artificial Sequence

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Chimeric oligonucleotide

<220>

<223> Description of Artificial Sequence: Chimeric
oligonucleotide

<400> 12
gggaccttga aggactatgc tgccgcagtc ttttgcacugg cgccatcgatccuucaagg 60
ucccgcgcg tttcgcgc

78

<210> 13
<211> 52
<212> DNA
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<223> Description of Artificial Sequence: Mouse DSG3
gene fragment

<400> 13
taagggtgacc tccctggaac ttccctgaata cgacgcggtc agttgtactg aa

52

<210> 14
<211> 79
<212> DNA
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Chimeric oligonucleotide

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oligonucleotide

<400> 14
gggaccttga aggactatgc tgccgcagtc ttttgcacugg cgccatcgatccuucaagg 60
ucccgcgcg tttcgcgc

79

<210> 15
<211> 79
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Chimeric oligonucleotide

<220>

<223> Description of Artificial Sequence: Chimeric
oligonucleotide

<400> 15

gggacattga aggacttatg ctgcgccagt ctttgacug gcgcagcaua guccucaag 60
gucccgcgcg ttttcgcgc

79

<210> 16

<211> 39

<212> DNA

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<223> Description of Artificial Sequence: COL7A1 gene
fragment from a normal human

<400> 16

agccaatcct tgagagtaca gtggacagcg gccagtggc

39

<210> 17

<211> 39

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: COL7A1 gene
fragment from a normal human

<400> 17

tcggtagga actctcatgt cacctgtcgc cggtcacccg

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<210> 18

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: COL7A1
polypeptide fragment from a normal human

<400> 18

Ser Gln Ser Leu Arg Val Gln Met Thr Ala Ala Ser Gly
1 5 10

<210> 19

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: COL7A1 gene
fragment from a human with dystrophic EB

<400> 19

agccaatct tgagagtata gtggacagcg gccagtggc

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<210> 20

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

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fragment from a human with dystrophic EB

<400> 20

tcggtagga actctcatat cacctgtcgc cggcacccg

39

<210> 21

<211> 68

<212> DNA

<213> Artificial Sequence

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Chimeric oligonucleotide

<220>

<223> Description of Artificial Sequence: Chimeric oligonucleotide

<400> 21

tccttgagag tacagtggac agcggtttc cgcuguccac tgtacucuca aggagcgcgt 60
tttcgcgc

68

<210> 22

<211> 68

<212> DNA

<213> Artificial Sequence

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Chimeric oligonucleotide

<220>

<223> Description of Artificial Sequence: Chimeric
oligonucleotide

<400> 22

tccttgagag taaagtggac agcggtttc cgcuguccac tttacucuca aggagcgcgt 60
tttcgcgc

68

<210> 23

<211> 39

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: COL7A1 gene
fragment from a normal human

<400> 23

ggggagcctg gaaagcctgg tattcccgaa ctcccaggc

39

<210> 24

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

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fragment from a normal human

<400> 24

cccttcggac ctttcggacc ataagggccc gagggtccg

39

<210> 25

<211> 14

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: COL7A1
polypeptide fragment from a normal human

<400> 25

Gly Glu Pro Gly Lys Pro Gly Ile Pro Gly Leu Pro Gly Gly
1 5 10

<210> 26

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: COL7A1 gene
fragment from a human with dominant negative EB

<400> 26

ggggagcctg gaaagcctag tattccgggg ctcccaggg

39

<210> 27

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: COL7A1 gene
fragment from a human with dominant negative EB

<400> 27

ccccctcgac ctttcgatc ataagggccc gaggggtccg

39

<210> 28

<211> 68

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Combined DNA/RNA Molecule:
Chimeric oligonucleotide

<220>

<223> Description of Artificial Sequence: Chimeric
oligonucleotide

<400> 28

cctggaaaagc ctagtattcc cgggcttttgc cccgggaaua ctaggcuuuc cagggcgcg 60

tttcgcgc

68

<210> 29

<211> 68

<212> DNA

<213> Artificial Sequence

<220>

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<220>

<223> Description of Artificial Sequence: Chimeric
oligonucleotide

<400> 29

cctggaaaagc ctagtattcc cgggcttttgc cccgggaaua ctaggcuuuc cagggcgcg 60

tttcgcgc

68

<210> 30

<211> 39
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fragment from a normal human

<400> 30
cctggtcccc cagggcctcg agggcccccg ggtgtctca

39

<210> 31
<211> 39
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fragment from a normal human

<400> 31
ggaccagggg gtcccgagc tcccgggggc ccacagagt

39

<210> 32
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
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fragment from a human with junctional EB

<400> 32
cctggtcccc cagggccttg agggcccccg ggtgtctca

39

<210> 33
<211> 39
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: COL7A1 gene
fragment from a human with junctional EB

<400> 33

ggaccagggg gtcccggaac tcccgaaaaa ccacagagt

39

<210> 34

<211> 68

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chimeric
oligonucleotide

<400> 34

cccccaggcc ctcgaggggcc cccgggtttc cggggggccct cgaggcccug gggggcgcg 60

tttcgcgc

68

<210> 35

<211> 68

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<223> Description of Artificial Sequence: Chimeric
oligonucleotide

<400> 35

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tttcgcgc

68

<210> 36

<211> 39

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Human KRT14
gene fragment

<400> 36

atgcagaacc tcaatgacccg cctggcctcc tacctggac

39

<210> 37

<211> 39

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<223> Description of Artificial Sequence: Human KRT14
gene fragment

<400> 37

tacgtcttgg agttaactggc ggaccggagg atggacctg

39

<210> 38

<211> 68

<212> DNA

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<223> Description of Artificial Sequence: Chimeric
oligonucleotide

<400> 38

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tttgcaga

68

<210> 39

<211> 68

<212> DNA
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<400> 39
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uuugcaga

68

<210> 40
<211> 68
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<400> 40
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tttgcaga

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<210> 41
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uuugcaga 68

<210> 42
<211> 33
<212> DNA
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<223> Description of Artificial Sequence: IL-1Beta gene
fragment

<400> 42
tctgaaggcag ccatggcaga agtacctgag ctc 33

<210> 43
<211> 33
<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence: IL-1Beta
gene fragment

<400> 43
agacttcgtc ggtaccgtct tcatggactc gag 33

<210> 44
<211> 68
<212> DNA
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<220>
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Chimeric oligonucleotide

<220>
<223> Description of Artificial Sequence: Chimeric
oligonucleotide

<400> 44
gcagccatgg cataagtacc tgagctttg cucagguact tatgccaugg cugccgcgct 60
tttgcgcg 68

<210> 45
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: IL-1Beta
gene fragment

<400> 45
gaaatgatgg cttattacag gtcagtgag acgctgagac c 41

<210> 46
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: IL-1Beta
gene fragment

<400> 46
ctttactacc gaataaggc cagtcacctc tgcgactctg g 41

<210> 47
<211> 68
<212> DNA
<213> Artificial Sequence

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<223> Description of Combined DNA/RNA Molecule:

Chimeric oligonucleotide

<220>

<223> Description of Artificial Sequence: Chimeric oligonucleotide

<400> 47

ggcttattac agttcagtgg agacgtttc gucuccacug aactguaua agcccgcgct 60
tttgcgcg

68

<210> 48

<211> 14

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: IL-1Beta polypeptide fragment

<400> 48

Arg Ser Leu Asn Cys Thr Leu Arg Asp Ser Gln Gln Lys Ser
1 5 10

<210> 49

<211> 42

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: IL-1Beta gene fragment

<400> 49

cgatcactga actgcacgct ccgggactca cagcaaaaaa gc

42

<210> 50

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: IL-1Beta
gene fragment

<400> 50

gctagtcact tgacgtgcga ggccctgagt gtcgtttttt cg

42

<210> 51

<211> 68

<212> DNA

<213> Artificial Sequence

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<223> Description of Combined DNA/RNA Molecule:
Chimeric oligonucleotide

<220>

<223> Description of Artificial Sequence: Chimeric
oligonucleotide

<400> 51

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tttgcgcg

68

<210> 52

<211> 39

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: TNFalpha gene
fragment

<400> 52

gaggaggcgc tccccaaagaa gacagggggg ccccaggc

39

<210> 53

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39

<210> 54
<211> 68
<212> DNA
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Chimeric oligonucleotide

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<223> Description of Artificial Sequence: Chimeric
oligonucleotide

<400> 54
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tttcgcgc

68

<210> 55
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: IL-1alpha
gene fragment

<400> 55
tgtgacccac aactatcatg gtcattaaag tacattggcc ag

42

<210> 56
<211> 42
<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence: IL-1alpha
gene fragment

<400> 56

acactgggtg ttgatagtagc cagtaatttc atgtaaccgg tc

42

<210> 57

<211> 68

<212> DNA

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<220>

<223> Description of Artificial Sequence: Chimeric
oligonucleotide

<400> 57

cacaactatc atagtcatta aagtattttu acuuuaauga ctatgauagu uguggcgcgt 60

tttcgcgc

68

<210> 58

<211> 39

<212> DNA

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<223> Description of Artificial Sequence: Mouse KRT17
gene fragment

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<210> 59

<211> 39

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Mouse KRT17
gene fragment

<400> 59

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39

<210> 60

<211> 68

<212> DNA

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<400> 60

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tttgcaga

68

<210> 61

<211> 68

<212> DNA

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Chimeric oligonucleotide

<220>

<223> Description of Artificial Sequence: Chimeric
oligonucleotide

<400> 61

acctcaatga cccctggcc tcctauuuuu aggaggccag gcggucauug aggutctgct 60

tttgcaga

68

<210> 62
<211> 45
<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence: COL7A1 gene
fragment

<400> 62
gcgggggaac ccggaaagcc tggcattcct ggactcccaag gccgg 45

<210> 63
<211> 45
<212> DNA
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fragment

<400> 63
cgcccccttg ggccttcgg accgtaagga cctgagggtc cggcc 45

<210> 64
<211> 68
<212> DNA
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oligonucleotide

<400> 64
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tttggaa 68

<210> 65
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Chimeric oligonucleotide

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oligonucleotide

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uuugggaa 68

<210> 66
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<220>
<223> Description of Artificial Sequence: Chimeric
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<400> 66
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tttgggaa 68

<210> 67
<211> 68
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Combined DNA/RNA Molecule:
Chimeric oligonucleotide

<220>

<223> Description of Artificial Sequence: Chimeric
oligonucleotide

<400> 67

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uuugggaa

68

<210> 68

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 68

aagaatgctg cccaccatg

19